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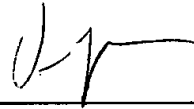
No fees are believed due in connection with this filing. However, if any fees are deemed necessary, the Examiner is hereby authorized to charge any such fees to Deposit Account No. 02-4300.

Applicants look forward to receipt of an Action on the merits.

Respectfully submitted,

SMITH, GAMBRELL & RUSSELL, L.L.P.

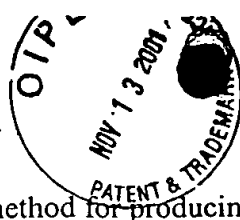
By



Dennis C. Rodgers, Reg. No. 32,936
1850 M Street, N.W., Suite 800
Washington, D.C. 20036
Telephone: (202) 659-2811
Facsimile: (202) 263-4329

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1. A method for producing basalt fibers, comprising the steps of:

preheating basalt;

introducing the preheated basalt into a melting furnace;

heating the basalt in a firing space within said furnace to form a glass mass;

providing the glass mass to a stabilizing section of the melting furnace, which stabilizing section is of a lesser height than the firing space and has an interior that opens out to the firing space, until the glass mass reaches a fiber manufacturing temperature, and then, introducing the glass mass from the stabilizing section into a feeder by passing the glass mass through a feed port extending between an interior surface of said stabilizing section and the feeder and retaining the glass mass in the feeder to obtain a glass mass having the composition

$$\frac{\text{Al}_2\text{O}_3 + \text{SiO}_2}{\text{CaO} + \text{MgO}} \geq 3$$

$$\frac{\text{FeO}}{\text{Fe}_2\text{O}_3} \geq 0.5$$

$$\frac{2\text{Al}_2\text{O}_3 + \text{SiO}_2}{2\text{Fe}_2\text{O}_3 + \text{FeO} + \text{CaO} + \text{MgO} + \text{K}_2\text{O} + \text{Na}_2\text{O}} [\geq] \geq 0.5; \text{ and}$$

forming fibers by pulling the glass mass from spinnerets which receive glass from the feeder.

8. Apparatus for producing basaltic fibers, comprising

a basalt receiver;

a melting furnace having a firing space and a stabilizing section with the stabilizing section being of lesser [heigh] height than the firing space and the stabilizing section opening out to the firing space;



a heat exchanger connecting the basalt receiver to the firing space for preheating
basalt which is charged into the melting furnace;

a feeder which receives molten glass from the melting furnace, said feeder being
connected by the stabilizing section to the firing space by way of a port opening
extending from an interior surface of said stabilizing section to said feeder;

spinnerets which receive molten glass from the feeder; and

mechanisms which pull fibers from the spinnerets.

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